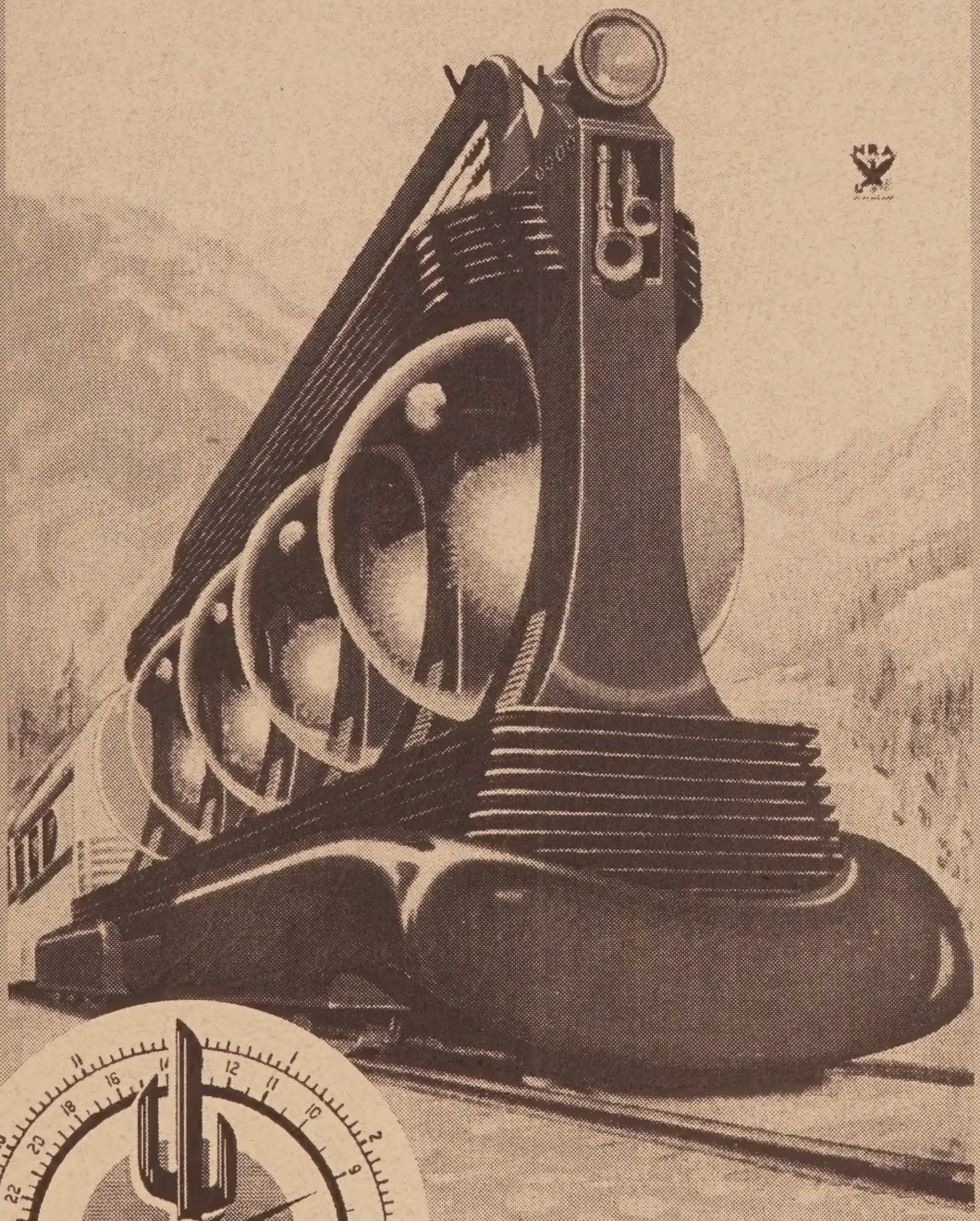
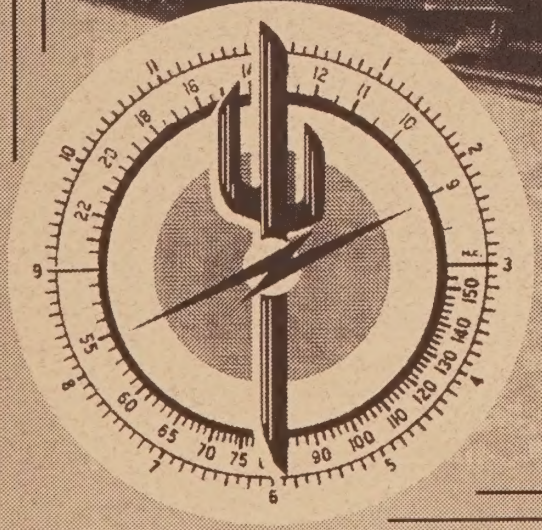
ARIZONA ANTIQUE RADIO CLUB NEWS





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ARIZONA ANTIQUE RADIO CLUB NEWS

Vol XVI, No 3 Fall 1999

Arizona Antique Radio Club

The Arizona Antique Radio Club was organized in 1983 for the preservation of the history and artifacts of radio and television, and for the advancement of knowledge and appreciation of radio technology and communication. The Club is a non-profit corporation organized primarily for the mutual assistance of radio devotees and collectors in Arizona. Membership, however, is open to any persons who have an interest in radio and television history, preservation, restoration, and collecting.

Meetings are held from October through May and consist of touring collections, presentations of technical, historical or restoration information, thematic displays of radios and the autobiographical experiences of the members. Our antique radio Swap Meets are usually scheduled for Spring and Fall meetings. Members of the Board of Directors are elected at the annual business meeting in May. Most meetings are held on Saturdays in the Phoenix and Tucson areas, and when possible, elsewhere within Arizona.

Membership dues are $18 (individual) or $20 (family) per calendar year and provide access to all club benefits including the quarterly issues of the *Radio Club News*. Send dues or membership inquiries to: **Arizona Antique Radio Club, 10513 E. Clinton, Scottsdale, AZ, 85259, phone (602) 860-8951.**

1999-2000 Club Officers
President: Dave Lambert 775-0531
Vice-President: Corrine Wiltsie 357-8954
Secretary: Dennis Craft 860-8951
Treasurer: Steve Smith 831-3095
Editor: Bill Lettow 730-6058
Additional Directors:
Martin Bergan 274-5895
David Cain 561-6228
Con Morton 996-8912

The Arizona Antique Radio Club News is the quarterly publication of the Arizona Antique Radio Club, Inc. It is mailed First Class to current members at the beginning of March, June, September and December.

Contributions: submission of articles, news items, fiction, photographs and other materials relating to radio history and collecting are greatly appreciated, particularly if they have an Arizona connection. All members are encouraged to broaden their interest in the hobby by sharing their experiences, opinions, knowledge and observations with the club through its publication. Send materials for publication to **Arizona Antique Radio Club, 2025 E. LaJolla Dr., Tempe, Arizona, 85282-5910. Phone is (480) 730-6058.** Email: **lettow@yahoo.com.**

Advertising: classified ads of reasonable length are free to members. Display advertising is also available, contact editor for current rates. Deadlines are the 10th of the month before publication. The club accepts no responsibility for transactions made in regards to published ads.
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Contributors:
Paula and Bob Bakinowski
Rick Barton
Charles R. Dotson
Joel Ekstrom
George A. Fathauer
George H. Fathauer
Harry Hyder
Dave Lambert
P. A. Kinzie
Con Morton
Andy Ooms
Bob Reek

Editor: Bill Lettow

AARC 2000 CALENDAR OF EVENTS

JANUARY
RADIO ROUNDUP

Saturday, **January** 8, 2000, see next page for details.

FEBRUARY
SPRING SWAP MEET

Saturday, **February** 5, 8am; Dave's Antique Radios, Tucson. Map is below.Don't miss our growing Tucson swap meet! Meet buyers and sellers who don't make the November meet.

To be fair to all, start time is 8am. Please no setting up or selling until 8am.

Contact: Steve Smith, (480) 831-3095 or Dave Vaughn, (520) 790-2618.

MARCH
AARC at the HAMFEST

Saturday, **March** ??, 7am; At the Hamfest at Scottsdale Community College.

Plans are to have a club radio display, and cluster members from our club together at the meet. We want to set up an AARC broadcast station for the meet. We need help with equipment and expertise to do this. Contact: Con Morton.

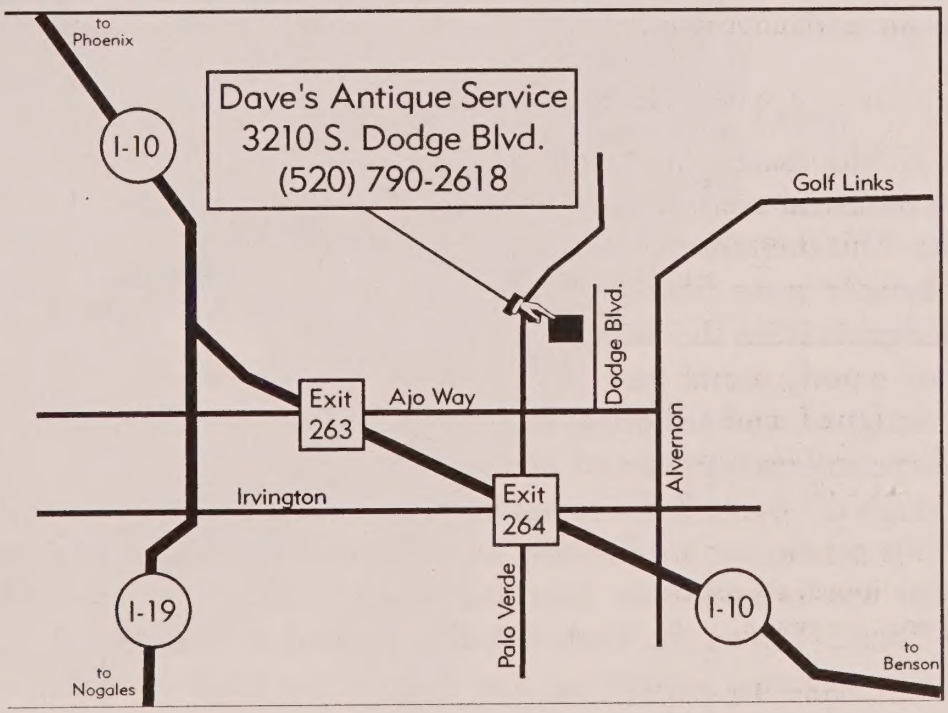
APRIL
RADIO BROADCASTING

Saturday, **April** 1, 1pm; location to be announced.

We need help putting together a meeting on the above topic. Please contact club officers if you would like to host this meeting or if you have something to share in this area.

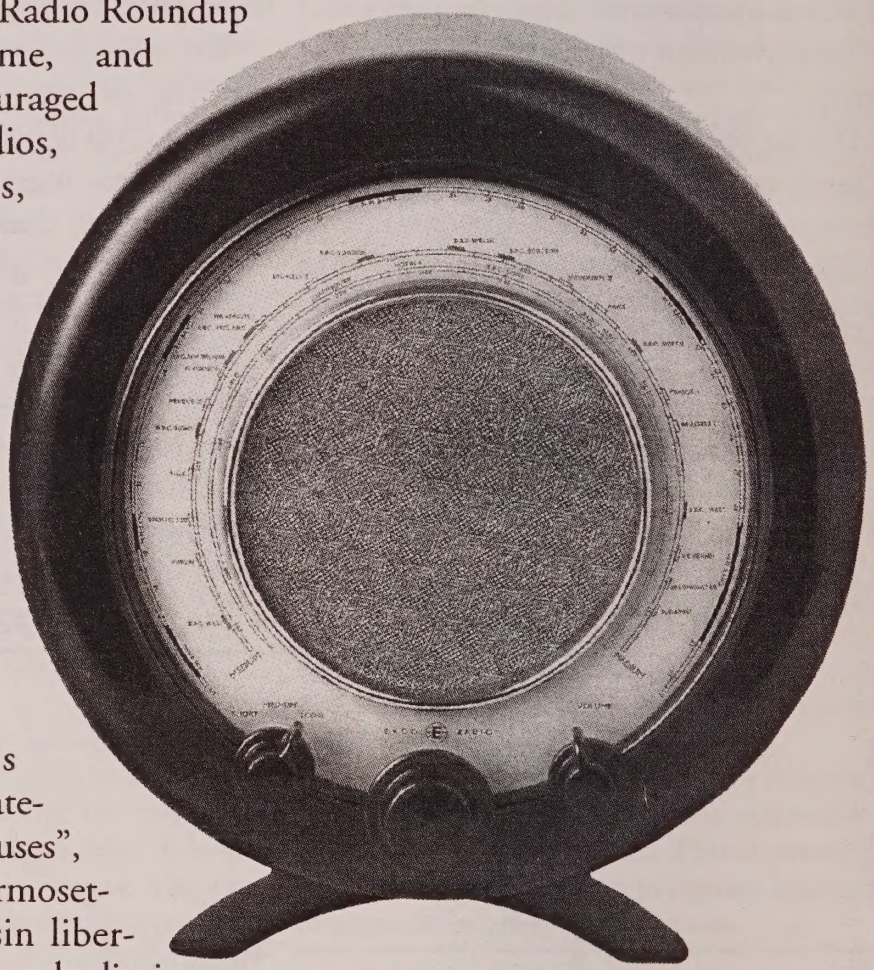
MAY
LAST MEETING

Saturday, **May** 6, 1pm; location and program to be announced. Board member elections and annual business meeting. Please consider volunteering your name for election to the Board of Directors. The club needs individuals willing to help lead the club.



Sixth Annual Radio Roundup

BAKELITE

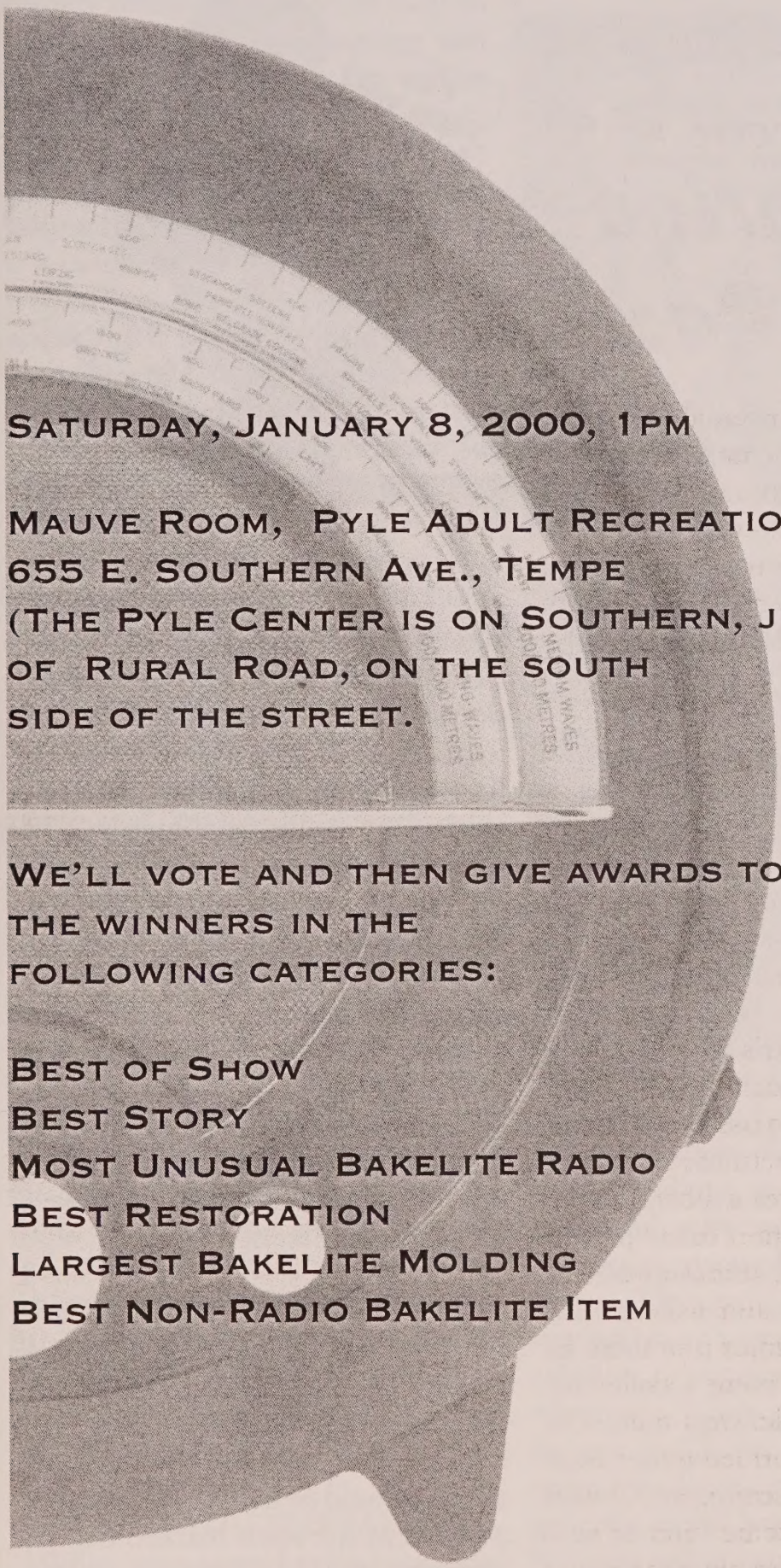


Every year our Radio Roundup features a theme, and everyone is encouraged to bring radios, advertising, signs, before-and-after pictures and related items which fit the theme. In years past we have had some large displays and many great stories to go with them.

This year's theme is "the material of a thousand uses", Bakelite. This thermosetting phenolic resin liberated designers from the limitations of wood, metal and glass, allowing some wonderful cabinets to be designed and ushering in a whole new way of envisioning and manufacturing mass produced items.

Although the name Bakelite has been used elsewhere for practically any pre-1950s plastic, we are limiting our theme to the real thing - the hard stuff that was formed under heat and pressure. That means NO Catalin, Beetle Plastic, Tenite, etc. Only bakelite, painted or au naturel.

We also welcome interesting non-radio items made of Bakelite. And don't forget those old phones and televisions.



Saturday, January 8, 2000, 1pm

Mauve Room, Pyle Adult Recreation Center
655 E. Southern Ave., Tempe
(The Pyle Center is on Southern, just west of Rural Road, on the south side of the street.

We'll vote and then give awards to the winners in the following categories:

Best of Show
Best Story
Most Unusual Bakelite Radio
Best Restoration
Largest Bakelite Molding
Best Non-Radio Bakelite Item

So you want to be an Antique Radio Collector?

Clearing Your Head

by Bill Lettow

Your first antique radio may have been a family heirloom, a chance find, a curiosity found while poking around a yard sale or a mini-mall. Since no one really needs an antique radio anyway, it was your second radio that made the difference. When you got the second one you became an antique radio collector.

My first radio was a lucky find, a Sparton mirrored glass radio found in the garbage in 1975. It wasn't until 1977 that I got a second radio, a 1938 Philco. The Philco played well, received the mysterious world of shortwave, and I learned there were many other old radios out there to be found. So I became a collector. There were rich pickings then. On any Saturday I could leave the house for a day of radio hunting and always return with a truck bed full of new acquisitions. There were no antique radio books or magazines; old radios were still junk to antique stores, Salvation Army and Goodwill stores and to people holding garage sales. Every find was a wonder, without books you weren't exposed to anything ahead of time; everything was new.

Needless to say, the landscape has changed for antique radio collecting.

In this and the following articles, and in upcoming issues, we'll try to give you some pointers on successful collecting, both from our own experience and from that of other club members, geared to those who are new to the hobby. What has worked for others may work for you.

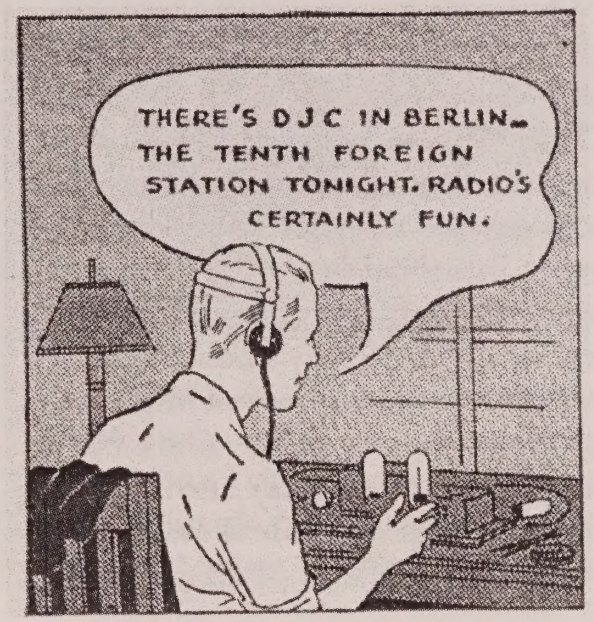
MOTIVATION

Is there something fascinating and perhaps undefinable about old radios that keeps you involved? I hope so, because that other big motivator, money, would be much more sensibly pursued in the stock market. I mention the obvious because in our

money oriented culture its easy to become caught up in buying and selling, and then to view the success or failure of the activity by the bottom line. This is almost guaranteed to sour you at some point. Nothing kills a hobby quicker than making it into a job.

When you have accumulated a few radios and it's time to sell one or two, you naturally will want what you paid for the radio, plus an amount to represent a general increase in value, plus what you spent on parts for it, plus a fair price for all the time you put into restoring it. On this basis, prepare to leave the swap meet with everything you brought to sell because your price is too high. If you want to get rid of the radio, 9 times out of 10, you'll take a loss. The funny thing is, if your motivation is that "undefinable something" you'll rarely regret a sale even if you lost money on the deal.

What you spend on radios is primarily money spent on entertainment. If you make a little money on a radio, fine, if you want to think of your collection as an investment, that's ok too, (if your portfolio of mutual funds is also up to date). If you lose or waste money on radios, think of it like you would a set of sports seasons tickets, a vacation or a big screen tv. Money spent to have fun. So here's our first tip: never forget what excites and fascinates you about radio. Keep your eye on the ball and have fun.



HELLO, TOM, HOW'S EVERYTHING?
NOT SO GOOD BILL, BUT I'M STILL PLAYING WITH RADIO. HAD DJC LAST NIGHT. IS RADIO STILL YOUR HOBBY TOO?

SHOULD YOU SPECIALIZE ?

When your second radio has made you a collector, the time has come to think about specializing. Many successful collectors are those who have concentrated on a particular theme. They collect crystal sets, or transistors, or a certain kind of wood cabinet, or catalin, or art deco or whatever. When you specialize in an area, and begin to acquire expert status by educating yourself on your specialty, it will have a great effect on bringing radios your way.

Our club has many of these collectors, Maury Sievers with crystal sets, Dave Lambert with Philcos, Clyde Watson with Scott radios to name a few. They are willing to help anyone with set identification, repair information, pricing, owners manuals, etc. A number of our local experts are nationally known experts as well. But in this process of giving, they hear about a lot of radios, both increasing their expertise and offering many buying opportunities along the way. They are offered items that don't fit into other peoples specialties and so on. They perform a needed service, and they are rewarded for it.

So its great to specialize, if you know what you like, or if you are a goal oriented type of person. But when you are starting out it's a mistake to specialize too soon. There are too many possibilities out there and you'll miss out on a lot of fun and discovery by limiting yourself before you're ready. As a beginning collector, specializing in, for instance, mirrored radios would make yours a dull hobby, unless you had a huge bankroll. There are not many of these radios out there on the market, and they are expensive.

With some time, you can figure out some pretty creative specialties that couldn't possibly have occurred to you early in the game. Sometimes an opportunity will present itself to get involved in an area where there are few competitors. Bill Burkett built up a world-class collection of transistor radios by specializing in them back when they weren't thought to be valuable and were selling by the pound at swap meets.

NO, TOM, I'VE BEEN TOO BUSY MAKING GOOD MONEY OUT OF RADIO LATELY TO "PLAY" WITH IT.
YOU'RE SURE LUCKY, BILL. I NOTICED YOUR NEW CLOTHES AND SNAPPY CAR. I THOUGHT YOU HAD INHERITED A MILLION.

One more note about specializing. You have to let people know about it! There's little point in it if nobody but your wife knows about it. Put it on your business card, run an ad in the club publication, offer to do a talk at a club meeting. As people associate you with a specialty, they'll remember you when they hear about something that's up your alley.

Tip two for new collectors: Consider specializing, but not too soon. If you do specialize, don't keep it a secret.

That's it for now. There's more in the following articles and we'll have something in upcoming issues. Note to experienced collectors: tell us what works for you. Write an article or contact the editor with your tips.

What's My Radio Worth?

By Dave Lambert

This simple question is often asked in the antique radio hobby. Unfortunately it is not an easy question to answer. It is my hope that the following discussion will help you to get that answer.

The best place to start in understanding the value of a set is to consult Marty and Sue Bunis' *The Collector's Guide to Antique Radios* which is currently in its 4th edition. This is a standard in the hobby and is widely used in pricing sets. Another major factor in determining the market value of a radio is eBay. A large number of radios change hands daily via the auctions here and observing the prices paid can give you a good estimate of the value and popularity of a particular radio. Finally subscribing to *Antique Radio Classified* will also provide you with valuable data as to what the going price for a radio might be.

Although all of the sources above give a good baseline as to the value of your set they are only guidelines as there are many other factors that should be considered in establishing value. These include:

Collector Interest

I define this as a set with widespread appeal among a large number of collectors. If a set has a high level of collector interest and is relatively uncommon it will command a high price. It may not be listed in a price guide or change hands on the Internet very often so establishing its value may be very difficult. An example of such set might be a Zenith Stratosphere. If you want one of these and are lucky enough to find one you are probably going to pay the asking price whatever it is!

Condition

A perfect original condition radio is very scarce. This set should have the original finish, grille cloth, knobs etc. It should have the proper tubes and its chassis should be clean and complete as viewed in the cabinet. Any repair work under the chassis should be done in a manner consistent with the age of the set and no modern components should be visible upon inspection. A radio in this condition is the holy grail of radio collecting and will normally sell at a significant premium above the value in Bunis.

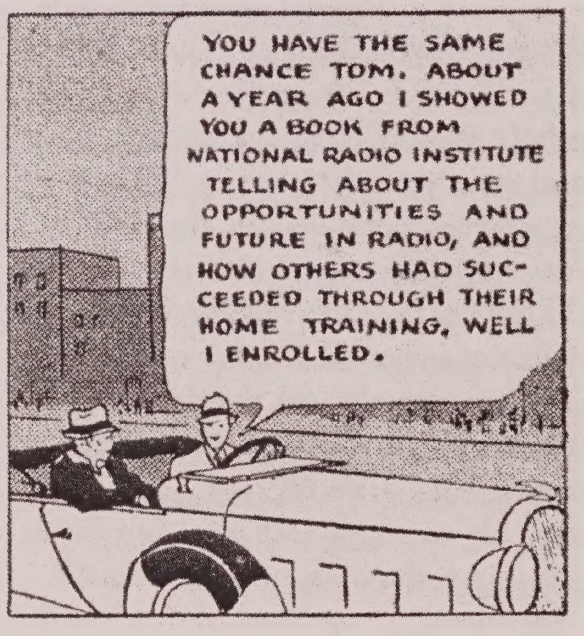
A correctly restored set is one in which major cabinet work or refinishing has been performed, the grille cloth has been replaced by one of the excellent copies available and or major surgery has been performed to the chassis. The finish should be a near duplicate of the original, the radio should play as well as new and the overall impression it gives should be of a well cared for or new radio. This set will probably sell at a premium to the price in Bunis as the

cost in time and money to perform correct restorations is significant.

An incorrectly restored set is a set with the wrong finish (how about those nice "antiqued" radios we used to see!), the wrong chassis, an incorrect speaker replacement, wrong grille cloth, wrong parts visible on the chassis, wrong knobs, etc. A set in this category might sell at the Bunis price or a small fraction of the Bunis price depending on how bad the offence is. In general your radio will be worth more unrestored than improperly restored.

Several comments on the playing condition of the radio are in order. It seems like the more common a set is, the more important its playing condition is. When selling an ac powered set form the 30s, 40s or 50s, the first question is inevitably "How does it play?". Answers that indicate operation that is less than perfect often result in a price significantly less than Bunis. On the other hand, if you are buying the Stratosphere discussed above the first question will be "How much?" and whether it plays or not will probably have little bearing on this. A large percentage of the battery sets from the 20s that are currently residing in collections are of unknown operational status because the owner never got around to powering them up. As many of these are sold without tubes anyway, the playing condition of sets from this era seems to be of lesser importance.

My final comments on condition have to do with eBay. There are some wonderful radios that change hands via eBay and some people even get a deal. However some of the sets that are listed there are firewood so be careful with your dealings there.


YOU HAVE THE SAME CHANCE TOM. ABOUT A YEAR AGO I SHOWED YOU A BOOK FROM NATIONAL RADIO INSTITUTE TELLING ABOUT THE OPPORTUNITIES AND FUTURE IN RADIO, AND HOW OTHERS HAD SUCCEEDED THROUGH THEIR HOME TRAINING. WELL I ENROLLED.

I'M DOING SWELL IN RADIO. MARY AND I ARE TO BE MARRIED NEXT MONTH. RADIO IS MORE THAN A PLAYTHING. IT'S A BIG BUSINESS AND GROWING FAST. TAKE MY TIP AND GET INTO RADIO NOW, TOM!

Adders

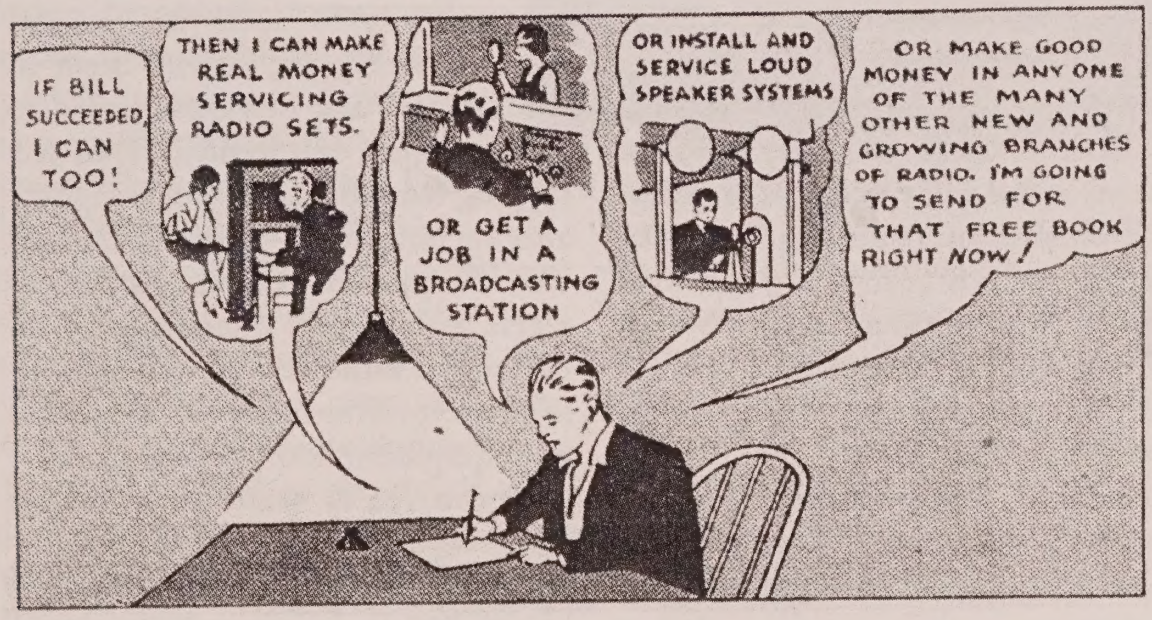
I will define adders as things that increase the value of the set that are not an actual part of the radio. An example of these might be the original carton and wrapper that the radio came in. Other items that I consider as adders include: the original bill of sale, the original owner's manual, an old repair bill from the set, documen-

tation that shows the set was owned by a famous person, documentation showing the set was used as a prop in a well known show. Adders can increase the price of a set a few dollars to more than double its Bunis value.

Buyer/Seller

How much your radio is worth is also a strong function of who is buying and who is selling. A dealer wants to buy low and sell high. This is how they are paying the bills so expect to sell to a dealer at a price lower than Bunis and buy from a dealer at a price higher than Bunis. In this situation you are paying for their expertise in finding radios and as it is getting increasingly hard to find sets, this isn't such a bad deal. On the other hand a collector who wants a set bad enough will often offer more than Bunis because the value they perceive the set will bring to their collection.

The geographic location of the buyer and seller also seems to have an impact. There just aren't as many radios here in Arizona as in other parts of the country so we tend to pay somewhat higher prices. After seeing the condition of some of the sets shipped here from back east we are lucky to have any sets at all. Geographic conditions don't impact the high end sets but be aware that some sets sell for less in some parts of the country.


IF BILL SUCCEEDED, I CAN TOO!
THEN I CAN MAKE REAL MONEY SERVICING RADIO SETS.
OR GET A JOB IN A BROADCASTING STATION
OR INSTALL AND SERVICE LOUD SPEAKER SYSTEMS
OR MAKE GOOD MONEY IN ANY ONE OF THE MANY OTHER NEW AND GROWING BRANCHES OF RADIO. I'M GOING TO SEND FOR THAT FREE BOOK RIGHT NOW!

I hope the discussion above will help you to answer the question of what your radio is worth. Remember the members of the Arizona Antique Radio Club have tremendous collective experience in establishing the value of antique radios so don't hesitate to call upon your fellow club members if you need help answering this question.

What's Left?

by Con Morton

A beginning collector may ask "is there anything left to find?", and after viewing Dennis Craft's collection of Atwater-Kents, fear that he or she were seeing all of the AKs within a thousand miles. Another question might be "is there anything left that I can afford?" The answer to both is a firm yes, but like diamond mining, it might take a lot of digging.

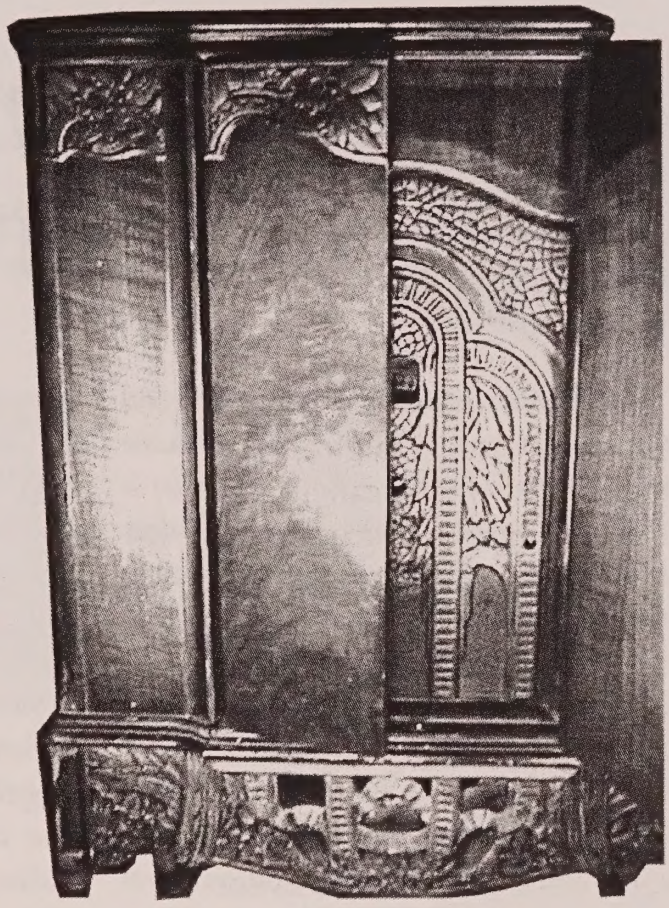
One of the easier but more expensive places to dig is on the internet. Ebay is about the biggest, another is the Online Radio Trader (http://members.aol.com/OLRTmag/main.htm). These are pricey spots but I have found some bargains on Ebay. Shipping can hurt though. One nice feature of Ebay is that you can treat it as a virtual museum and view a lot of neat stuff as well as get a feel for the high end of the price ranges. Also try www.ezlink.com/~crash/parks/radio.html. This is Warren's Antique Radio Restoration World, a neat place with lots of good information and restoration histories. Don't forget www.antiqueradio.com, home page for *Antique Radio Classified.*

Another way to spend an afternoon of possibly free entertainment is a visit to the local antique malls. Again the prices may be optimistic but you get to see a lot of other neat stuff free and where else could you find such a unique labor saving device from yesteryear as the hand operated pump vacuum sweeper?. Then there is Glendale, which is an experience in itself, a veritable plethora of little antique shops, antique malls and, well, antique places and places with antiques co-mingled with other things. Well worth an afternoon with lunch at Aunt Pitty Patt's.

Antique radio swap meets, such as our own AARC meet this November and the spring AARC meet in Tucson, are the obvious choice to look at, touch, talk about and buy sets ranging from bargain to stratosphere and in condition from WOW to YUCK! The Hamfests are great swap meets with a good smattering of old radios and radio related items mixed in with typical amateur radio gear and test equipment and assorted stuff.

If you really want to muck in

YOU CERTAINLY KNOW RADIO. MINE NEVER SOUNDED BETTER
N.R.I TRAINING CERTAINLY PAYS. I JUST STARTED A FEW MONTHS AGO AND I'M ALREADY MAKING GOOD MONEY IN MY SPARE TIME.
THANKS!



the mud, try thrift shops, an occasional great deal may result and or one that will really try your patience and skill. I have found a couple of Atwater-Kent table models that were best described as five loosely connected pieces of, hopefully related, wood with something resembling a chassis inside, but they did turn out nice and are very presentable as well as playable. Then there are the Yard Sales, these are akin to rock mining, lots of hard digging but an occasional gem makes it worthwhile, you need to ask those holding the sale though, many times they may have an old radio and not think it worthwhile to set out. The Stromberg Carlson model 11A, radio phonograph, shown here was found at a yard sale. I had just purchased an intriguing piece of audio gear and was talking to the owner, who said that he did have an old radio phonograph that they wanted so get rid of and that it was in the house if I would like to see it. I would, I did and when I inquired about the price, hoping that I could afford it, he replied $30. Trying to keep my voice from cracking and not appear too hurried, I paid up and he helped load it into my Jeep and I was on my way. Gads, it is a pretty set, needs a bit of cabinet work, but isn't restoring and returning these old pieces to life what it is about?

So, yes they are out there, enjoy and happy hunting.

OH, TOM, IT'S WONDERFUL HOW FAST YOU'VE GONE AHEAD IN *RADIO*. WE NEVER COULD HAVE GOTTEN MARRIED ON WHAT YOU WERE GETTING BEFORE.
OUR WORRIES ARE OVER. I'M MAKING GOOD MONEY NOW, AND THERE'S A FUTURE AHEAD FOR US IN *RADIO*.

Up and Coming!
The MIDGET RECEIVER

Diamonds are not necessarily shipped in box cars, nor does a radio set have to be housed in a large cabinet to be a thoroughly good receiver. While midget receivers will never replace the console receiver as the major radio installation in the home, they find vast usefulness as an auxiliary installation in numbers of ways. Not only this, but with the mantel set the man who cannot afford a hundred or more dollars for a pretentious receiver can still have a modern receiver of modest size, with proportionate cost

By Ralph L. Power

(This article first appeared in the January 1931 issue of *Radio News*. -Ed.)

Midget golf, midget motor cars and midget radio sets. And this doesn't necessarily mean that people are satisfied with small-sized editions of the real thing. either.

What it does mean, though. is that midget or pee-wee golf takes the place of a full grown course for those who cannot get away from the city to the country club, and it serves as a practice area for those who want to perfect certain parts of the game.

The midget or baby motor car seems to have a field as a second family car, especially valuable in city traffic.

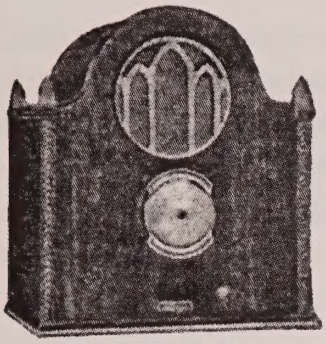
The midget or mantel radio receiver does not at all mean merely that it is a low-priced commodity or one which competes with the more fully grown receivers.

But the mantel type set has been largely instrumental in bringing in the two-set home and providing radio entertainment, too. for those who cannot afford the higher priced outfits.

The smaller, more compact sets have proved their worth as a portable to take away on vacation jaunts, as a set for the guest chamber, one for the nursery, servants' quarters and even in the family garden.

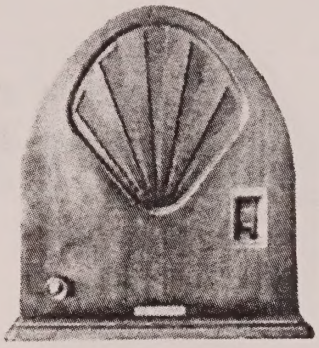
Starting towards the close of 1929 in Los Angeles, in an attempt to keep factories going during a depression, the movement has gone into full swing so that there are now 37 factories in the southwest in actual production of mantel sets and at least four, if not more, nationally known radio organizations have followed suit.

Just what the ultimate result will be of the entrance of national groups into the field is, of course, problematical. Certain it is that the southwestern factories have the momentum of an

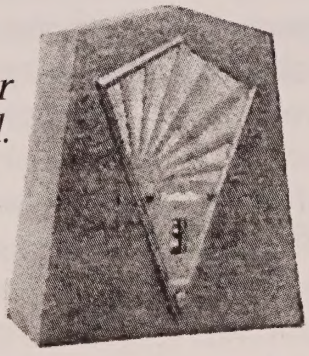


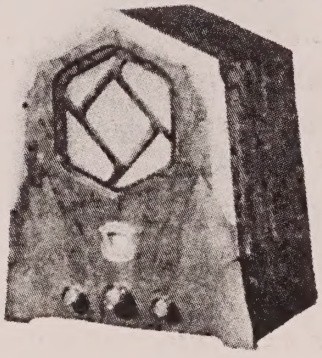
Premier Elec. Co.

Powel Mfg. Co.

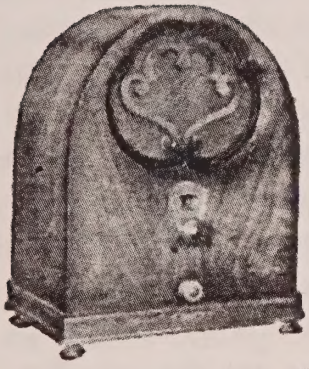


Keller-Fuller Mfg. Co., Ltd.





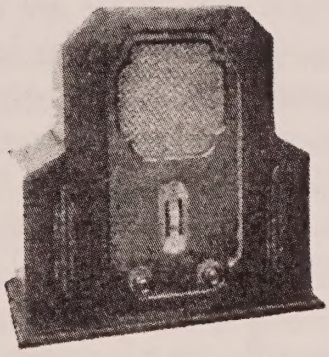
Jewel Mfg. Co.

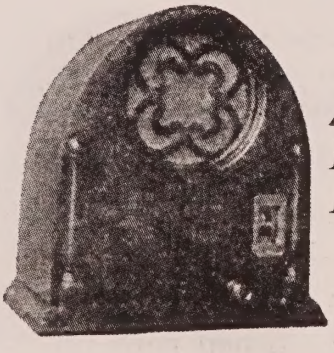


Keller-Fuller Mfg. Co., Ltd.

Jesse French & Sons Piano Co.

Pilot Radio & Tube Corp.

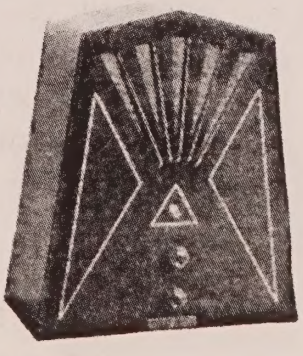


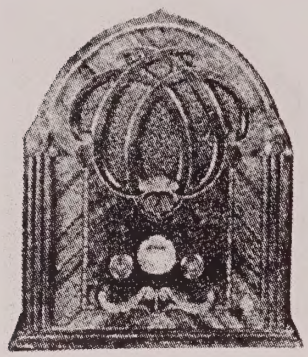


Atchison Radio Mfg. Co.

Jackson Bell Company

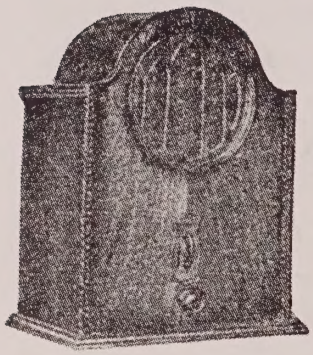
Plymouth Radio Corp.





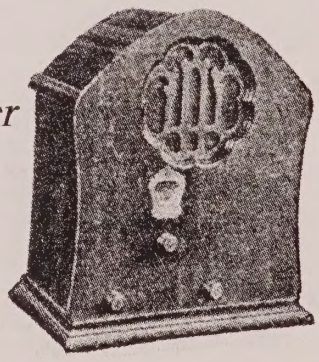
Colonial Radio Mfg. Co.

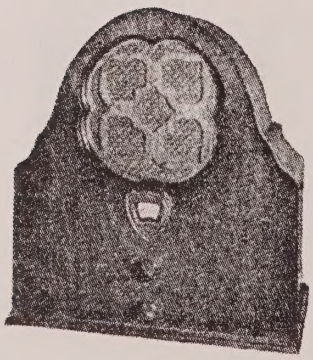
Colin B. Kennedy Corp.



Republic Radio Co.

Transformer Corp. of Amer.





Davison - Haynes Mfg. Co.

early start, if that means anything, and a pretty good sized part of the research work done there is evidenced in the sets now actually on the market.

General Design Features

In large measure, the mantel sets are fairly similar in cabinet design, although there are outstanding features to distinguish them apart-curved peaks for some, futuristic designs in others, one or two with a clock inserted in the face of the cabinet. One shop puts out mantels in a dozen different paint jobs to match the furniture, while another has inserted a phonograph turntable in the top and thus makes a creditable miniature radio-phonograph combination set.

In the matter of the technicalities of these small sets there is not a great deal of difference although every month or so some one manufacturer comes out with a change or two to furnish opportunity for a "new line."

Let's look at an average set and see what's in it. Here are the specifications and work sheet for one of the factories. D.C. voltage into filter 300; d.c. voltage out of filter to -45 plate, 225; d.c. voltage to r.f. Plate, 175; d.c. voltage to power detector plate, 50; to -45 grid, 45; to power detector screen, 22 maximum (volume control) ; to r.f. screen, 100; to r.f. cathodes 1 to 12 (volume control) ; to power detector cathodes, 1 to 10; 40-volt surge with tubes removed; a.c. voltage with side transformer secondary, 560; a.c. voltage r.f., power detector, -45 filament, 2.2; a.c.voltage -80 filament, 4.9.

The speakers, small sized, are ordinarily full dynamic, especially built to

match the receiver-special field winding. 2,400-ohm, and a special voice-coil spider peaked approximately 80 cycles. Rola, Magnavox and Lansing speakers seem to predominate in the western factory make-up.

A.F. couple-resistance couple of special design (not Loftin-White), with 500 volts maximum, designed for flat curve amplification and minimum plate voltage and drain, 300 volts maximum at source.

R.F. system-two stages sharply tuned screen-grid r.f. with coils designed for maximum gain per stage without the necessity of shields, thereby preventing the losses incurred through the use of shields; three-gang condenser.

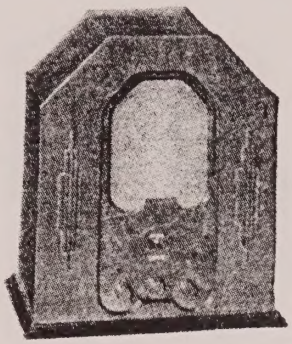
In this the gain of the r.f. channel is actual to the average receiving set which employs three stages with shields. The interstage coupling is minimized through proper coil design and proper arrangement of coils on the chassis.

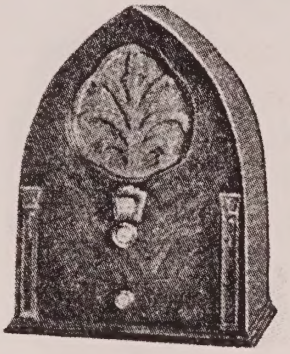
Oscillation is obtainable and controllable, thus adding considerably to gain and selectivity with a fairly even distribution of stations at the lower end of the dial.

The volume control is practically perfect, without loss of tone quality at any setting, and there is no absorption or loss in gain at the maximum setting.

It controls the r.f. bias, power detector screen and power detector simultaneously, thereby incurring no overloading of electric strain on any part of the circuit; smooth anti positive in operation not subject to excessive wear and thus necessitating

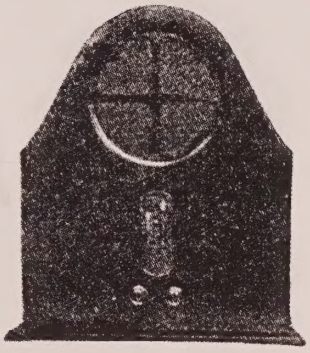
Gray - Danielson Mfg. Co.

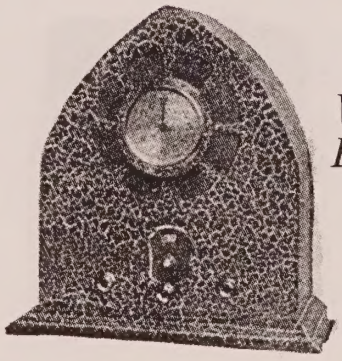




Zaney - Gill Corp.

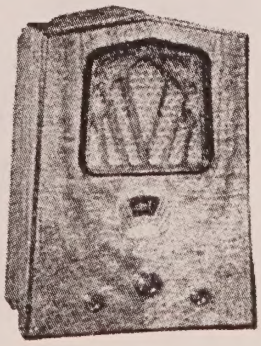
Woodstock Elec. Corp.



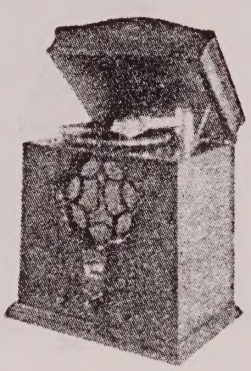


Woodstock Elec. Corp.

Pierce Airo, Inc.

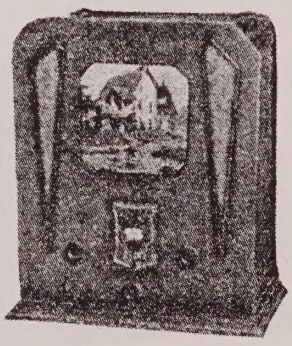


Simplex Radio Co.



Cardinal Radio Mfg. Co.

Patterson Radio Corp.



Flint Radio Co., Inc.

The Sterling Mfg. Co.

frequent replacement.

In the filter system, the speaker field acts as a choke; condensers, 16 mfd. total. This is of the electro-chemical type and is not subject to corrosion or seepage. The voltage rating is conservative, self-healing in the event of punctures and perfectly sealed from moisture.

The power transformer is conservatively rated, is well insulated, designed for effective cooling, L-shaped core allowing coils to he separated and resulting in better ventilation, mounted on chassis for free air circulation.

So this five-tube set - three screen grids (one is the power detector), a -45 and a -80 - can be taken as an "average" mantel type set.

Similarity of Midgets

I think, on the whole, that while the more than thirty factories are getting out the same number of different sets, there is no radical difference to be noted in any of them.

Some of them vary in the number of r.f. stages, some using two and others three. Some use the Loftin-White and some resistance coupling in the audio. Some use two and others three stages of screen grid. A few are using -27's instead of screen grid in the power detector circuit. Some shield while others do not.

There are. of course, various ramifications in attempts either to make the set a trifle different from other makes or in the interests of getting out something actually better.

By far the majority of the cabinets are in walnut or veneer, with a dark,

hand-rubbed finish. One manufacturer has just begun to go into production for his multicolored line in jazzy colors, while another is designing his cabinets in the form of a replica of famous California missions.

The average list price is $59.50, although perhaps a quarter of the factories list at ten dollars higher. There is an additional charge for the carrying cases if needed.

One set is made in the form of a valise with handles on the side.

The Los Angeles factories range from small stores with perhaps ten employees and 100 sets a week, to the largest with more than 100 men and 2,000 sets every seven days.

There are, of course, a few backyard manufacturers, that is, men who do ten or a dozen sets a week in their garage at home and peddle the sets direct to the retail trade.

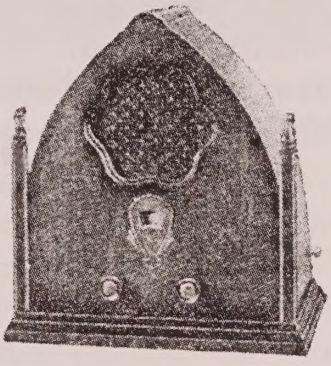
For sundry reasons, perhaps the difficulty and the time lost in locating miniature parts, the small establishment and the home set-builder have not done very much in this field as yet.

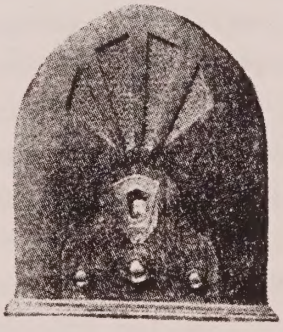
So the mantel type movement, starting originally to keep the men busy during dull times, has actually developed an entirely new market. Still in the embryo state, almost any day some new development may take place which might make revolutionary changes in the actual set-up of these small, low-priced receiving sets. The majority of midget set makers are licensed under RCA, Hazeltine and La Tour patents.

Griffin - Smith Mfg. Co., Ltd.

U. S. Radio & Television Corp.

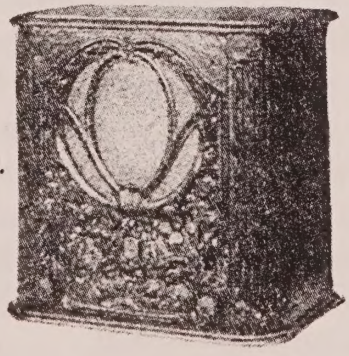
Advance Elec. Co.





Automatic Radio Mfg. Co.

Crosley Radio Corp.



Is a Felony Being Committed Here ?

A letter from Rick Barton

While we roam the bands on our antique radios, scanners, communications receivers and ham gear, a war is being waged in the halls of Congress over our right to do so. HR-514, a bill which has passed the house and is now in Senate committee, is being pushed strongly by the cellular industry. This bill would make it a felony to listen to non-broadcast communications. In House hearings, Thomas Wheeler, representing the Cellular Telecommunications Industry Association, called scanner hobbyists "electronic stalkers", even though cellular bands have been blocked out of new scanners for many years and the industry is going digital at a great pace..

Club member Rick Barton, who has a special interest in listening to all sorts of radio broadcasts and traffic, encourages everyone to contact their legislators to defeat this bill. The following is his letter to Senator McCain:

Richard D. Barton, Jr.
16635 N. Cave Creek Road
Phoenix. Arizona 85032
July 5, 1999

United States Senator John S. McCain
241 Russell Bldg.
Washington, D.C. 20510

Senator McCain,

I am writing as a voter and a constituent to express my concerns regarding a bill before your committee, HR-514. 1 am concerned both as a shortwave radio hobbyist and as a Block Watch captain who uses a radio scanner in this capacity. This bill is unnecessary and is an over reach of government. Enforcement of existing law would be preferable to passing this bill.

Representatives Tauzin and Wilson feel it is necessary to rewrite the Communications Act of 1934 because they believe it is too old to be relevant to the 21st century. Could this be said about the Bill of Rights as well?

Representative Tauzin feels it is necessary to change the wording of the Act from "intercept and divulge" to "intercept or divulge" (the content of non-broadcast communications) as he sees that a criminal could cause

The author's radio room. Is a felony being committed here?

harm to an innocent victim even if the content of the communications is not disclosed to a third party. I agree. But the Act of 1934 also forbids PROFITING from details of private radio communications. That and the fact that there are already laws making it illegal to listen to cellular communications ought to be enough.

If the cellular telecom industry wants additional privacy, let them put their money where their mouth is and scramble, encrypt, or otherwise secure their transmissions over the airwaves.

I am NOT against privacy. But, I must buy curtains for my windows at home. I do not expect the federal government to legislate privacy for me by banning binoculars, telescopes, the construction of backyard kids treehouses. or using my sidewalk after sunset.

In nearly twenty years. the cellular industry has done NOTHING to protect the privacy of their customers, except hoodwink government into passing privacy laws for them.

As a conservative/libertarian, I believe it is simply NOT the legitimate function of government. especially the FEDERAL government, to assist private business in marketing its product. In the past. privacy laws enacted on behalf of Big Cellular, have been gimmicks to help them do just that. Let Motorola, Nextel and Cellular One do their own marketing without the help of the U.S. Congress.

Congressional micromanagement of scanner radios and other technical aspects of radio are not in keeping with Republican promises to scale

down the invasiveness of government.

For too long, I have seen government grant special treatment to Big Cellular never accorded to radio related industries in the past. Why?

It is just the result of marketing strategy that the public believes that a microwave radio transceiver with phone-patch access is a "wireless telephone." But when GOVERNMENT buys the propaganda that radio isn't really radio if it is "wireless," it is a civil libertarian's nightmare.

I realize the twisted and distorted picture cellular lobbyists have painted of radio hobbyists. We are painted with a broad brush and labeled "stalkers," "techno-creeps," and "hackers"; some say people who sit around listening to radio need to "get a life."

I would respectfully remind you that one avid radio scanning hobbyist before his death just over a year ago was United States Senator Barry Goldwater. Though most radio hobbyists probably will never ascend to the high office of United States Senator, truly, Barry, "K-7-U-G-A," was one of us.

Perhaps, Thomas Wheeler (of the Cellular Telecommunications Industry Association) could come out here to Arizona and tell us to our faces: the most legendary political figure in our entire State's history was a "creep", or a "stalker" for including radio scanning among his many radio related activities.

Of course. not all uses of radio scanners are recreational.

The late Herb Drinkwater, beloved Mayor of Scottsdale. never left home without running the scanner in his Suburban. More than a few times, "Mr. Scottsdale" beat paramedics to the scene of traffic accidents to assist the injured.

I myself have phoned loved ones to warn them to get everyone inside, lock the doors, and close the windows as a result of something I've heard over the scanner.

All this will be lost with the passage of HR-514; when Phoenix PD switches to the digital format in a few years, as one interpretation of the bill says, scanners would be forbidden to receive any digital format.

I know in Arizona, it is probably sacrilegious to put words in the mouth of Senator Goldwater. But, I believe in my heart of hearts that if Barry were alive today, "pure poppycock" would be one of the most charitable phrases the salty Senator would have to say in describing HR-514.

Senator. I respectfully urge you to oppose HR-514.

Respectfully and sincerely,
Richard D. Barton. Jr.

Book Review

Raised on Radio

BY GERALD NACHMAN
PANTHEON BOOKS, 1998

Reviewed by Harry Hyder

No one who is less than 55 years old can remember the great days of radio, the 1930s and 1940s, when radio was the only form of home entertainment. Even the author of this book admits that he knew radio only in its fading days, the late 1950s. Nachman really grew up on television, but he has done a fine job of researching and describing radio's great days. I remember them well.

There are many more AM broadcasting stations on the air today than there were in the old days, but network broadcasting has disappeared. Today we have local broadcasters with various "formats": rock in its endless varieties, country, news, sports and others. Some stations generate their own programming and others receive their programs via some unnamed satellite source.

The four major networks once dominated the airwaves, but there were also many smaller independent stations. Two of the networks were NBC (Red and Blue) plus Columbia and Mutual, The networks had affiliated stations all over the country, which received the network programs over telephone lines and rebroadcast them. The daytime programs were usually transcribed on 16 inch 33—1/3 RPM discs, so that the stations could use them at any desired time. Night time network programs were broadcast live.

Most daytime programs originated in Chicago. Most were soap operas, such as *One Man's Family* and *Helen Trent's Romance*. In the late afternoon came programs for youngsters, such as *Orphan Annie*, *The Lone Ranger* and *Jack Armstrong, All American Boy*. Then there was a gap of an hour or so that the local stations could fill with news or something else of local interest. At seven, prime time programming started. These programs originated in New York or Hollywood.

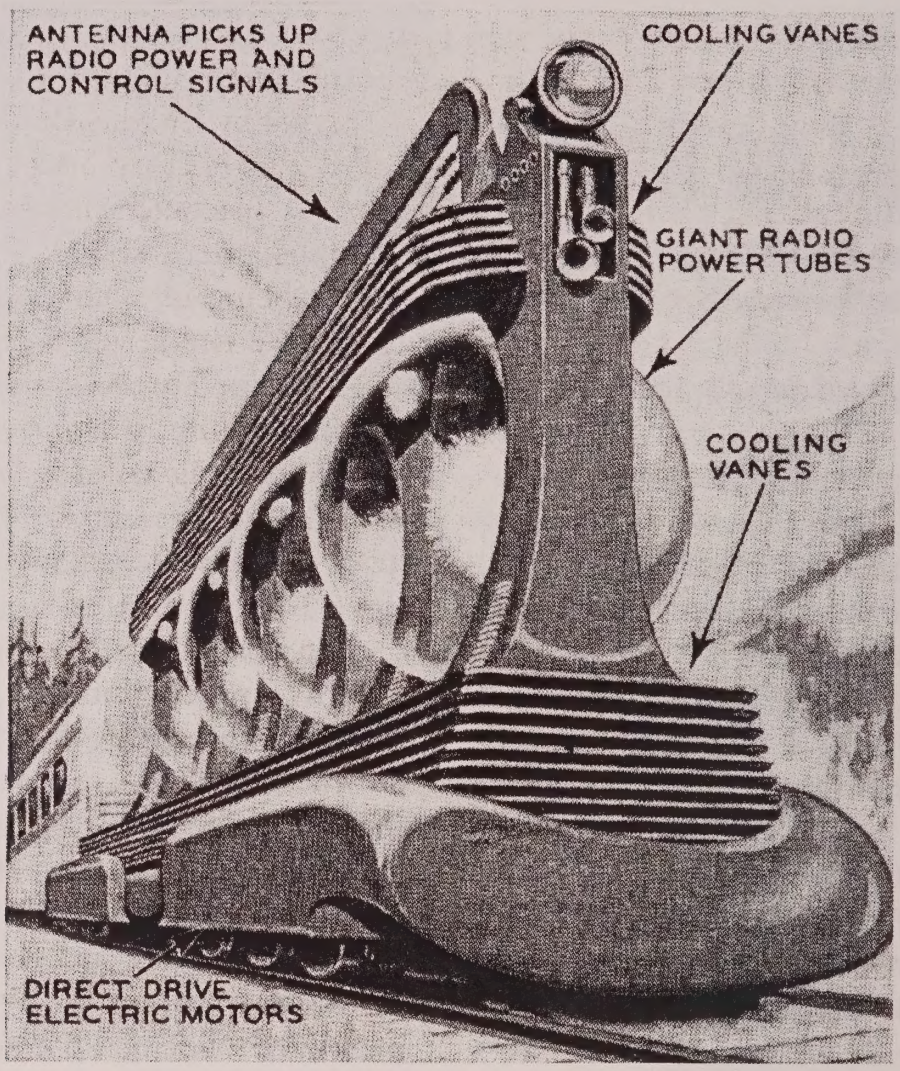
During the thirties, some prime time programs were actually performed twice, once for east coast stations and a few hours later broadcast by west coast stations.

Later in the evening there would be mystery dramas, such as *The Shadow, Lights Out* and *The Whistler*.

In the 1940s there was a trend towards broadcasting prime time programs transcribed rather than live. There was some audience objection to this. Some thought that listening to a recording detracted from their enjoyment of a program.

During the 1930s and 1940s there was occasional mention of television, and everyone assumed that it would come eventually, but no one could foresee what it would be like.

In the meanwhile, a listener to a drama could create a scene in his mind that was far superior to any scene that could be created in a future TV studio.


ANTENNA PICKS UP RADIO POWER AND CONTROL SIGNALS
COOLING VANES
GIANT RADIO POWER TUBES
COOLING VANES
DIRECT DRIVE ELECTRIC MOTORS

RADIO TUBE TRAIN GETS POWER FROM AIR

Transmission of power by radio will result in some radical changes in industry, especially in the field of transportation.

Recent experiments with railroad handcars run by radio suggested the design for a radio tube locomotive shown above. The electrical engineer who conceived the unusual power plant claims that such a locomotive could be controlled without a pilot.

The body of the locomotive would be surmounted by a series of huge radio rectifier and receiving tubes. The gigantic tubes could be built of unbreakable glass. Vanes running the full length of the car above and below the tubes will radiate excess heat and prevent the red hot electrodes from melting.

Electrical power impulses from a hydro-electric generating plant would be picked up by the antenna, rectified, and transmitted to the motors. Radio impulses could also control the train.

(Reprinted from the August 1934 issue of *Modern Mechanix and Inventions.*)

Notes from the Workbench

by Joel Ekstrom W1UGX

Notes from the Workbench is a regular feature of the Radio Club News. It is a forum for servicing ideas, restoration tips and answers to your questions. Send material or email to the Editor, address on page 2.

Many older AC—DC radios employed a resistance line cord to drop the line voltage to a value suitable for a series string arrangement where the total filament voltage is less than the line voltage. Since resistance line cords are a vanishing breed these days, some other means must be found to achieve the desired voltage reduction in radios where the resistance line cord is defective, Of course, a power resistor mounted in the radio could be used, provided that sufficient means is provided for dissipating the heat generated by such a resistor. Or, the tube lineup could be changed to use higher filament voltage tubes so that the total voltage would equal the line voltage, but purists would probably balk at this.

Another method, suggested to the author by Charlie Rhodes of the Radio History Society, is to put a reactance in series with the filament string, the reactance being of such a size as to reduce the series string current to the correct value, while maintaining the correct total series string voltage. Of course, the voltage across and current through each filament will no longer be in phase, but this probably is of no consequence. The reactance could be either inductive or capacitive, but capacitors are easier to adjust to a proper value by putting several in series or in parallel. However it is done, do not use electrolytic capacitors—they are polarity sensitive and usually have tolerances that are too wide for this application.

Being desirous of sparing the reader the boring mathematical details, a simple table of results is presented here. A line voltage of 120 volts at 60 Hz is assumed, together with a series string current of 150 MA. The first column is the total desired series string voltage, and the second column contains the appropriate values of the series capacitor.

Continued next page.

For a series string current of K times 150 MA, the required capacitance value would be multiplied by K.

E total	C (mfd.)
30	3.42
40	3.52
50	3.65
60	3.83
70	4.08
80	4.45
90	5.01
100	6.00

The following additional points need to be made:

1. Obviously this method will work only with AC line voltage.

2. The working voltage of any capacitors used needs to be at least 150 volts.

3. For voltages not listed, linear interpolation can be used to find the required capacitor value.

4. Capacitor values within 5% of a tabulated or interpolated value would probably be satisfactory.

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ANTIQUE TUBES bought and sold. Includes brass base 201s and earlier and uncommon radio and trasmitting tubes. GEORGE H. FATHAUER, 921-9961. See http://members.home.net/fathauer.

WANTED: "Tom Thumb" radios made by the Automatic Radio Company. All models. GEORGE A. FATHAUER, 116 N. Roosevelt, Suite 121, Chandler, AZ, 85226, 961-5176.

WANTED: Top quality signal generator, in working condition with manual. RICK MOUNTJOY, 926-8174.

HI! I'm looking for a schematic for a GE X216A table top wood cabinet radio, possibly a 1948-49 model. Also need a ballast tube (RR7013).

When you "thought" you had "one of those..."

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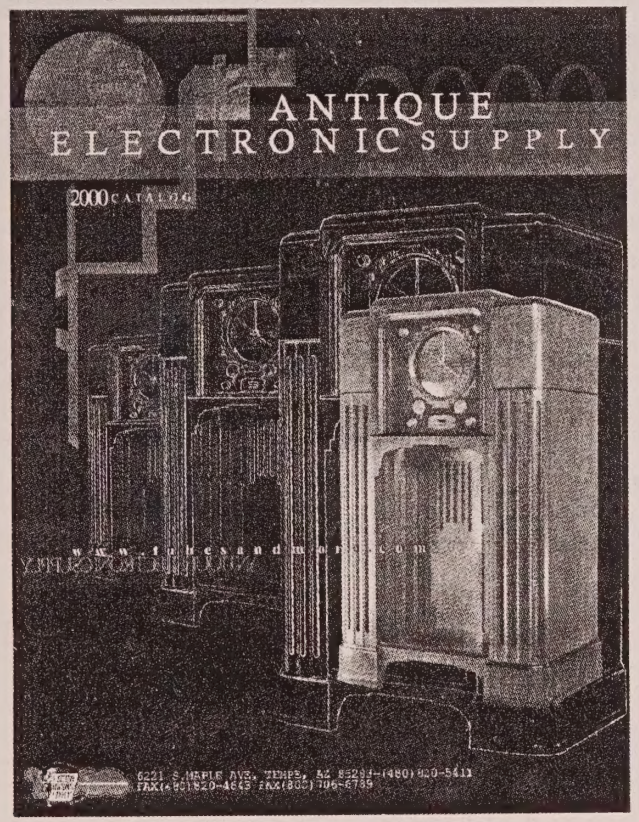

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TUBE COLLECTOR'S ASSOCIATION FORMED. This new group is now in operation. Started by dedicated collector/historians, it is international in scope, nonprofit, and noncommercial. It addresses tubes of all vintages and types. For a membership application and sample copy of *Tube Collector*, please contact the club at PO Box 1181 Medford, OR 97501. Details are also available from AL JONES, W1ITX, (707) 464-6470 or LUDWELL SIBLEY (541) 855-5207.

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Dept. 119 **New Orleans, La.**

WANTED: Silver Marshall audio transformers Models 220 and 221 to complete an early superheterodyne project. Also need a three-gang variable condenser, a Cardwell 317-CL or a Remler type 33. CLYDE WATSON, 8311 Via de Sereno, Scottsdale, 85258, 948-6466, clydelois@earthlink.net.

FOR SALE: General Electric clock radio model C-540, early 60s, walnut, mint condition, AM/FM. BETTY, (480) 966-0389. Ad submitted by non-member.

BOB'S - BUY, SELL, REPAIR ANTIQUE RADIOS. Located in Recliner City Store, 506 E. Ft.Lowell, Tucson, 85705. (520) 623-7901

SERVICE OFFERED: Expert radio cabinet repair and refinishing to original appearence. MARK TOPPO, 439-3556.

SERVICE OFFERED: If you have a problem that you can't fix I'll take it on. Tube type receivers and audio equipment only. GEORGE H. FATHAUER, Arizona Tube Audio, 688 W. 1st St., Tempe, 921-9961.